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ABSTRACT

The value of four pre-training screening devices for predicting student teaching effectiveness was examined. The four activities were a) microteaching for 7 minutes, b) microteaching for 30 minutes, c) role playing using reality therapy, and d) values conflict discussion. These activities were administered to 52 undergraduates in the Brigham Young University Individualized Secondary Teacher Education Program. Following each activity, an evaluation of the participants was made. The predictive areas of evaluation included a) interaction of the participant with the students during the student teaching experience, b) interaction of the participant with other teachers during student teaching, and c) general teaching effectiveness of the participant during student teaching. Following the student teaching, an evaluation of the participants was made by their cooperating teachers. A comparison of the data revealed that the 7-minute microteaching was the most consistent predictor of student teaching success. The 30-minute session was the poorest predictor. The remaining activities proved to be irrelevant to the student teaching evaluation. (Ten references and one table of statistical data are included.) (BRB)

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Abstract

This study examined the value of four pre-training screening devices for predicting student teaching effectiveness. It was found that the seven-minute micro-teaching session was the most consistent predictor of student teaching success. Neither the role playing session nor the values conflict discussion were sufficiently related to student teaching evaluations to warrant their use as screening devices for prospective teachers. The 30-minute micro-teaching session was the poorest predictor of student teaching success.

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PREDICTING STUDENT TEACHER EFFECTIVENESS[1]

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The pre-training selection of successful teachers has often been suggested as a vital need of education (Eliassen & Martin, 1945; Macdonald & Doll, 1961; Magee, 1952; Marsh & Wilder, 1954). It has been thought that such a screening process, if effective, could help eliminate wasted effort at teaching people who are not ready to learn to teach, improve the quality of teaching in schools, and ease the current dilemma of a surplus of new teachers.

Attempts at early identification of successful teachers have included relating supervisor ratings or other judgments of teaching success with such variables as attitude toward teaching, word fluency, scholastic aptitude, reading achievement, grade-point averages, self-concept, and personality (e.g., Garvey, 1970; Giebink, 1967; Knoell, 1953; Wilk & Edson, 1963; Winward, 1960). In general, the predictive value of the above measures varied from study to study. Comments frequently offered by the authors of such studies suggest that the inability of certain measures to consistently predict teaching success may be due to the fact that the required pre-teaching performance on these measures is not sufficiently similar to the behaviors good teachers are required to perform.

It was the purpose of the present study to examine the relationship between four pre-training screening activities (designed to approximate behaviors teachers are likely to perform) and supervisor ratings of student teacher effectiveness. The four activities were: (a) micro-teaching for

seven minutes; (b) micro-teaching for 30 minutes; (c) role playing using reality therapy; and (d) values conflict discussion.

Method

Subjects

The subjects were all 52 students participating in the Brigham Young University Individualized Secondary Teacher Education Program (I Step) fall semester, 1970. I Step is a teacher education program which allows students to complete their pre-student teaching training at approximately a self-paced rate, and which recommends certification on the basis of ability to perform specific behaviors rather than ability to endure a sequence of education courses.

Following assignment to the I Step program, the students were assigned to a team of one, two, or three students according to their teaching major and/or minor. These teams were then randomly assigned to one of four groups, which were under the direction of I Step personnel. Each of the four groups participated in one of the four screening activities described below during the first three weeks of the fall semester, 1970.

Screening Activities and Evaluation

Micro-teaching for seven minutes. Each student presented a lesson to a group of his peers on any subject he chose. The lesson was video taped and was completed within the time allowed (seven minutes). An evaluation and playback of the tape followed the presentation. Thirteen students participated in this activity.

Micro-teaching for 30 minutes. Everything except the alloted time was the same as with the 7-minute session. Seventeen students participated in this activity.

Role playing using reality therapy. The students role played with two younger people (teenagers) using reality therapy (Glasser, 1965) as a means of modifying behavior. Ten students participated in this activity.

Values conflict discussion. Each student discussed with two or more of the staff their feelings and ideas with regard to several assigned readings dealing with the conflict of values. Twelve students particpated in this activity.

Evaluation. Following each screening activity, the I Step personnel conducting the activity rated the students in three areas: (a) how well it was expected the student will get along with the students in his classes during student teaching; (b) how well it was expected the student will get along with other teachers during student teaching; and (c) the overall teaching effectiveness expected during student teaching. The students were rated on a scale from one (low) to five (high) by each of the I Step personnel conducting the various activities. The final rating score was an average of the scores given by each of the staff members on the rating team.

Student Teaching Evaluation

Evaluations of the student teachers by their cooperating teachers were completed following the student teaching experience and were recorded on standard Brigham Young University, Teacher Clearance Office evaluation forms TCO, ST8a and TCO, ST8b. These forms are normally intended to evaluate performance in the areas of human relations, professional competence, and personal and professional qualities. The present study, however, obtained separate average scores for those questions dealing with how well the student teacher related with students and other teachers, and an overall effectiveness score using the average score for all questions. Each question was rated from one (performance less than acceptable) to five (outstanding performance).

Data Analysis

Product-moment correlations were computed to evaluate the relationship between comparable ratings by the I Step screening activity staffs and the cooperating teachers.

Results

The correlation coefficients relating the screening activity ratings with the student teaching ratings are reported in Table 1.

Insert Table 1 about here

The seven-minute micro-teaching ratings were significantly related to the evaluations of overall teaching effectiveness and effectiveness in relating to students. The ratings of the role playing sessions were related only to the evaluations of the student teachers' relationships with students. The ratings of the values conflict discussion were positively related only to the overall effectiveness ratings.

The 30-minute micro-teaching ratings were unrelated to any of the three student teaching evaluations, and none of the screening activity ratings were significantly related to the evaluations of how well the student teachers related to other teachers.

Discussion

The ratings of the seven-minute micro-teaching session appeared to be more consistent predictors of the ratings made following student teaching than the ratings of the other three screening activities. These results suggest that some consideration be given to the use of the seven-minute micro-teaching session as a pre-training selection device. At the very least, future studies should be concerned with replication of the present study and,

perhaps, refinement of the seven-minute micro-teaching technique for use as a screening method.

Although the role playing session and the values conflict discussion were each related to one of the student teaching ratings, they were not sufficiently related to the student teaching evaluations to warrant their use as screening devices for prospective teachers.

It is interesting to note that the 30-minute micro-teaching activity was practically worthless as a predictor of student teaching success. This was true in spite of the value of its briefer counterpart, the seven-minute micro-teaching session. This raises an important question of whether the screening devices or other variables (e.g., variation in standards of judgment) were responsible for the correlational differences obtained. It would be well, in a replication study, to use the same judges for each of the screening activities to insure a more uniform standard of judgment. This was not possible during the present study because of practical limitations, but would be an important proceduralchange for further research.

It is also worth noting that none of the screening activity ratings were significantly related to the evaluations of how well the student teachers related to other teachers. This finding makes sense when one considers a basic assumption of this study. Specifically, it was assumed that pre-training selection activities would be more predictive of teaching effectiveness if they were designed to approximate the behaviors teachers are likely to perform. The current screening activities were designed more to approximate teacher-to-student relationships than teacher-to-teacher relationships. Quite naturally, then, the screening activities were better predictors of teacher-student relationships and overall teaching effectiveness than they were of teacher-teacher relationships.

References

Eliassen, R. H., & Martin, R. L. Pretraining selection of teachers during 1940-1943. Journal of Educational Research, 1945, 38, 666-677.

Garvey, R. Self-concept and success in student teaching. The Journal of Teacher Education, 1970, 21, 357-361.

Giebink, J. W. A failure of the Minnesota Attitude Teacher Attitude Inventory to relate to teacher behavior. Journal of Teacher Education, 1967, 18, 233-239.

Glasser, W. Reality Therapy: A new approach to psychiatry. New York: Harper and Row, 1965.

Knoell, D. M. The prediction of teaching success from word fluency data. Journal of Educational Research, 1953, 46, 673-683.

MacDonald, J. B., & Doll, R. C. Who is ready for teacher education? The Journal of Educational Sociology, 1961, 35, 123-127.

Magee, R. M. Selection of candidates for teacher education. Journal of Teacher Education, 1952, 3, 168-172.

Marsh, J. E., & Wilder, E. W. Identifying the effective instructor: A review of the quantitative studies, 1900-1952. Research Bulletin AFPTRC-TR-54-44, United States Air Force, 1954.

Wilk, R. E., & Edson, W. H. Predictions and performance: An experimental study of student teachers. Journal of Teacher Education, 1963, 14, 308-317.

Winward, E. J. A study of the effectiveness of the California Psychological Inventory as an instrument for distinquishing successful and unsuccessful teachers. Unpublished Master's thesis, Utah State University, Logan, Utah, 1960.

Footnotes

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Table 1

Correlation Coefficients Relating Screening Activity Ratings to Student Teaching Ratings

Screening Activities	Ratings After Student Teaching		
	Relate to Students	Relate to Teachers	Overall Teaching Effectiveness
Seven-Minute Micro-Teaching (N=13)	0.62*	0.42	0.50*
30-Minute Micro-Teaching (N=17)	-0.06	-0.07	0.05
Role Playing-- Reality Therapy (N=10)	0.56*	0.02	0.07
Values Conflict Discussion (N=12)	0.30	0.36	0.54*

*$p < .05$, one-tailed test.